Annual Design Competition 1990

Award Winning Housing For Nova Scotia

Nova Scotia Department of Housing

Canada Mortgage and Housing Corporation / Société canadienne d'hypothèques et de logement

Canadian Home Builders' Association of Nova Scotia

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Award Winning Housing For Nova Scotia No. 5

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Competition and Purpose

The Competition

The Nova Scotia Department of Housing, in conjunction with Canada Mortgage and Housing Corporation and the Canadian Home Builders' Association of Nova Scotia, welcomes you to participate in this fifth annual design competition. The problem posed this year reflects the particular concern of the sponsors to improve the quality of housing design and construction, while meeting the changing needs of older Canadians in our society.

The Purpose

The purpose of this competition is to encourage architectural students to create workable housing designs that will effectively solve a problem posed by the sponsors. While students receive recognition and a forum to hone their talents, Nova Scotia's housing industry benefits with fresh ideas, viable projects for future development and a chance to see the next generation of architects at work.

The Problem

Senior Citizens Garden Suites

The project is to design one single and one double occupancy Garden Suite.

Garden Suites are small, self-contained units which are usually placed on the same lot as the home of close family members. The suites should be designed for easy assembly on-site, and are to be easily moveable. The suites should accommodate living, dining, cooking, sleeping and storage.

Provide about 500 square ft. for the double suite and about 475 square ft. for the single suite.

The main purpose of garden suites is to enable elderly people to live close to a host family while maintaining their independence and privacy.

The submission should clearly show the way in which the suite fits into a typical suburban location, and the method of assembly of the suites.

The site is in a typical 25-30 year old "grid" suburb with lots 70 ft. x 110 ft. The houses are single family homes. Typically 24 ft. x 36 ft. bungalows.

Sponsors

Nova Scotia **Department of Housing**

The programs carried out by the Nova Scotia Department of Housing help many Nova Scotians to obtain basic, adequate and affordable housing. Under the Legislative Authority of the Housing Act and the Nova Scotia Housing Development Corporation Act the Nova Scotia Department of Housing develops and implements programs and special initiatives to achieve its organizational mission. This mission states the department shall assist and foster an environment in which the private sector, the communities and the government may respond to the housing needs of Nova Scotians with special emphasis placed on low income, the aged in need, and other disadvantaged people.

Canada Mortgage and Housing Corporation / Société canadienne d'hypothèques et de logement

Canada Mortgage and Housing Corporation's activities are governed by the National Housing Act and its regulations and the Canada Mortgage and Housing Corporation Act.

CMHC's purpose, as embodied in the National Housing Act, is "to promote the construction of new houses, the repair and modernization of existing houses, and the improvement of housing and living conditions."

Under the terms of the NHA, the Corporation is authorized, on the Government's behalf, to establish a system of mortgage loan insurance; to acquire lands for public purposes; and to assist Canadians in gaining access to suitable accommodation and in improving existing dwellings and the quality of their community environment. It also has a general mandate to improve the quality of housing and community planning through research, development and the dissemination of information, and to act as a policy advisor to the Government.

Canadian Home Builders' Association of *Nova Scotia*

The Canadian Home Builders' Association of Nova Scotia is a provincial network of builders, renovators, trade contractors, suppliers and other building industry professionals.

It acts as a clearing house for information by providing newsletters, reports, training programs, conferences and seminars. These provide its members with valuable technical, operational and industry information designed to make their businesses grow in a competitive environment.

CHBA/NS is the organization that represents professionals in the home building industry. Through membership and active participation on important industry issues, much credibility is gained. Consumer education activities help present and future customers to better understand this important sector of the provincial and national economy.

The Jury

Mr. Henn Soosaar
Nova Scotia Department of Housing

Ms. Jennifer Foster
Housing Assistance Non-Profit Development Society (HANDS)

Mr. Glen Wither
Canada Mortgage and Housing Corporation

Mr. Edmond Benoit
Canadian Home Builders' Association of Nova Scotia

Jury's Comments

The Jury was composed of people involved in the fields of design, construction, and implementation of housing for the elderly. This year's design problem of an optional housing form for the elderly was of special significance because each of the Jury Members have had some involvement and exposure to several pilot projects of "Garden Suites" in various provinces in Canada.

The priorities established by the Jury as judging criteria were many, and included such things as layout efficiency, transportability or ease of assembly, neighbourhood compatibility, economics and livability.

It is fair to say that these issues were dealt with in all schemes presented with a high degree of competence and sensitivity to the needs of the elderly.

The Jury was unanimous in its praise of the high caliber of work presented, and congratulates the winners and all of the entrants for their effort and participation in this competition.

First Award

Frank Hilbich

Designer's Comments

The intent of this design is to provide a system of panel construction based on a 4 ft. module. The system begins with an 8 ft. x 12 ft. pre-fabricated core unit that contains all the mechanical and major electrical services—the "machines" required for a dwelling. The rest of the building is created by the assembly of modular panels. The panels are made from standard, commonly available construction materials, are easily transportable and are designed to require minimal labour for assembly. Since they come pre-finished inside and out, the only task once placed in position is to push aside the insulation, attach and tighten nuts and bolts, then join and seal vapour barriers with staples and sealant. These areas of connection where finishes are ragged and gaps remain, are covered by the molding and trim assemblies that also serve to give visual articulation to the interior and exterior surfaces. The panel system also offers flexibility in terms of space requirements. Depending on the number of occupants, a larger suite is built with an extra panel bay on either or both ends of the suite as needed or preferred.

Jury's Comments

The Jury was favourably impressed by several aspects of this scheme, particularly with the efficient layout, the potential for mobility, and the building form, which would appear to have neighbourhood acceptance within a wide range of housing types.

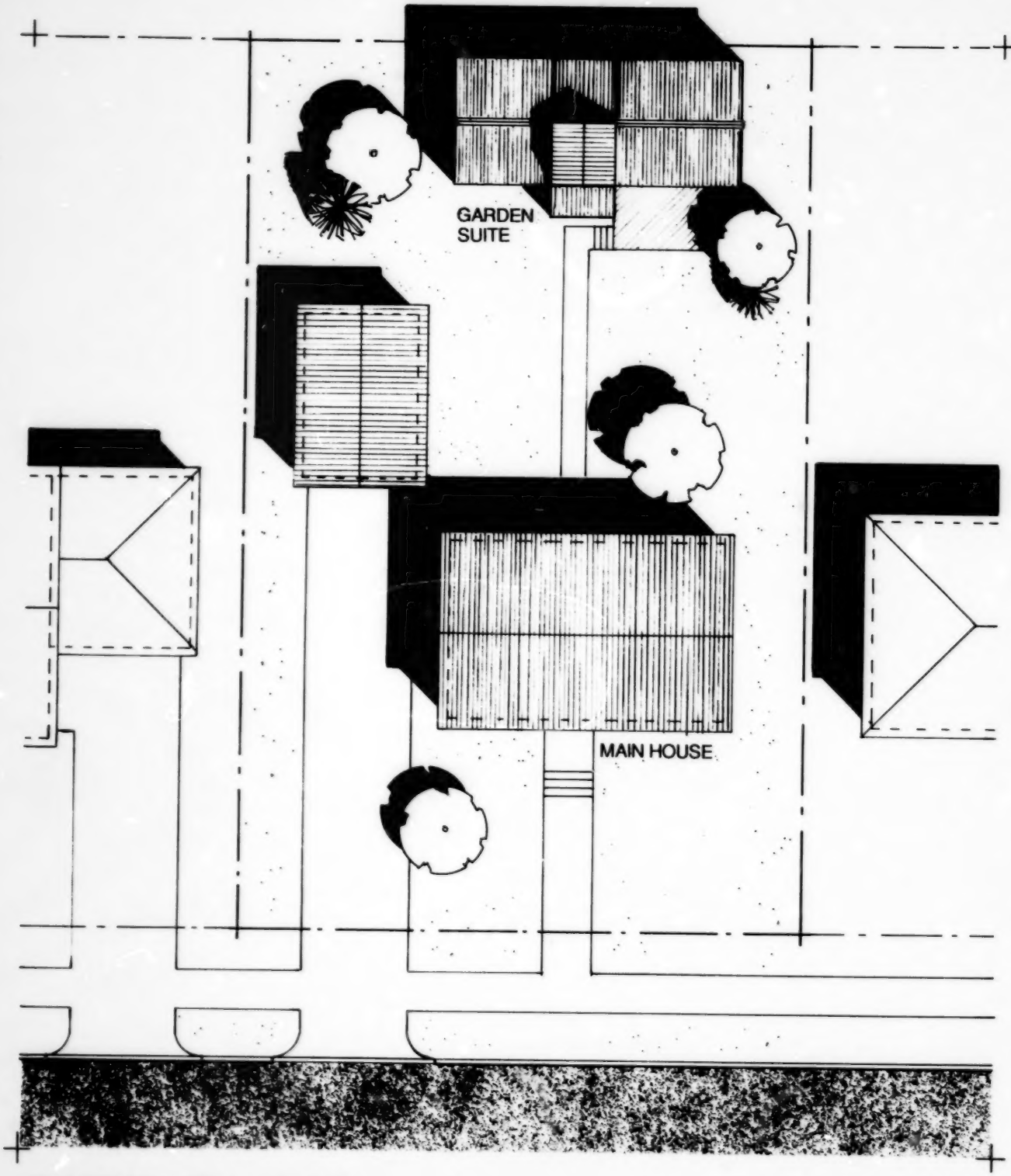
The simple rectangular layout effectively uses the bathroom/kitchen "core" as a dividing element between the two major spaces, namely the bedroom and the living/dining room. The clever integration to the kitchen within the living/dining space maximizes the volume of the major living area.

Mobility of the unit as a panelized system is resolved with a lot of detail, and it was felt that the size of the unit does not restrict it from being totally factory built and shipped to the site as a package.

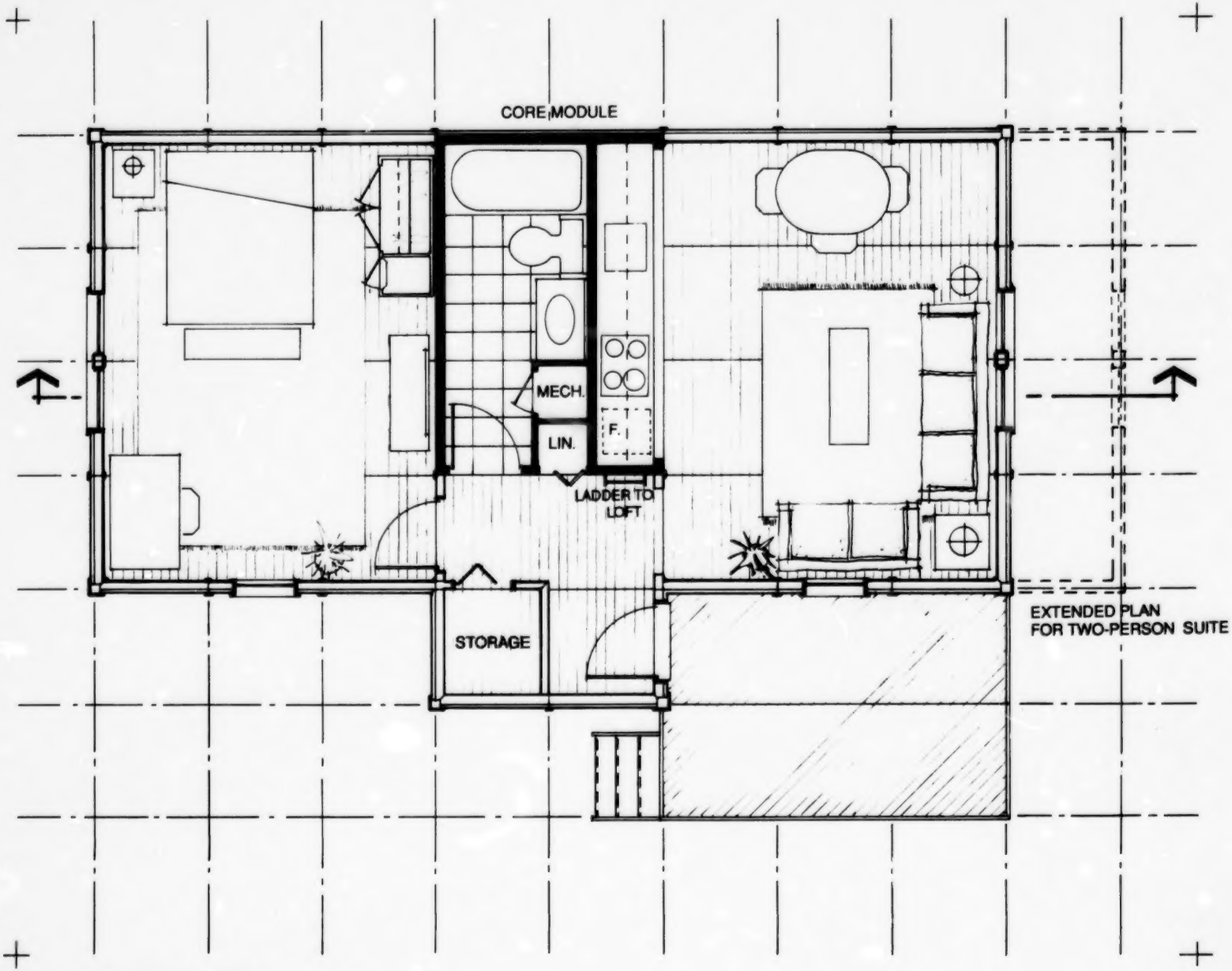
It was also felt that the "storage loft" was not necessary or desirable due to poor accessibility, and that the dormer motif could be lowered and incorporated over the entry porch.

Also, the bathroom unit in its present form is not freely accessible for wheelchairs but can be made so with minor modifications.

Overall, a well presented, complete scheme.



SITE PLAN 1: 200


CORE MODULE
MECH.
LIN.
F.
LADDER TO LOFT
STORAGE
EXTENDED PLAN
FOR TWO-PERSON SUITE

FLOOR PLAN

Second Award

Alan MacDonald

Designer's Comments

This project is concerned with providing adaptable housing for the elderly, while maintaining a high degree of self-sufficiency and individuality. The structure is based on a modular grid, which in term has been established according to the standard market size of the materials (primarily, the 4 x 8 plywood sheet).

Sheets are cut to form 2' x 8' panels, which become the basis for the design. Wall and window panels are fitted into a structural frame of light timbers (6" x 6"). These are easily interchangeable, allowing great flexibility in the location of windows, doors and interior partitions.

Initial construction is done on site; however, once the components are made, the system can be broken down and transported. This can be done by either separating the three main components of the structure and moving these, or by breaking it down panel by panel for reconstruction in a new location.

Jury's Comments

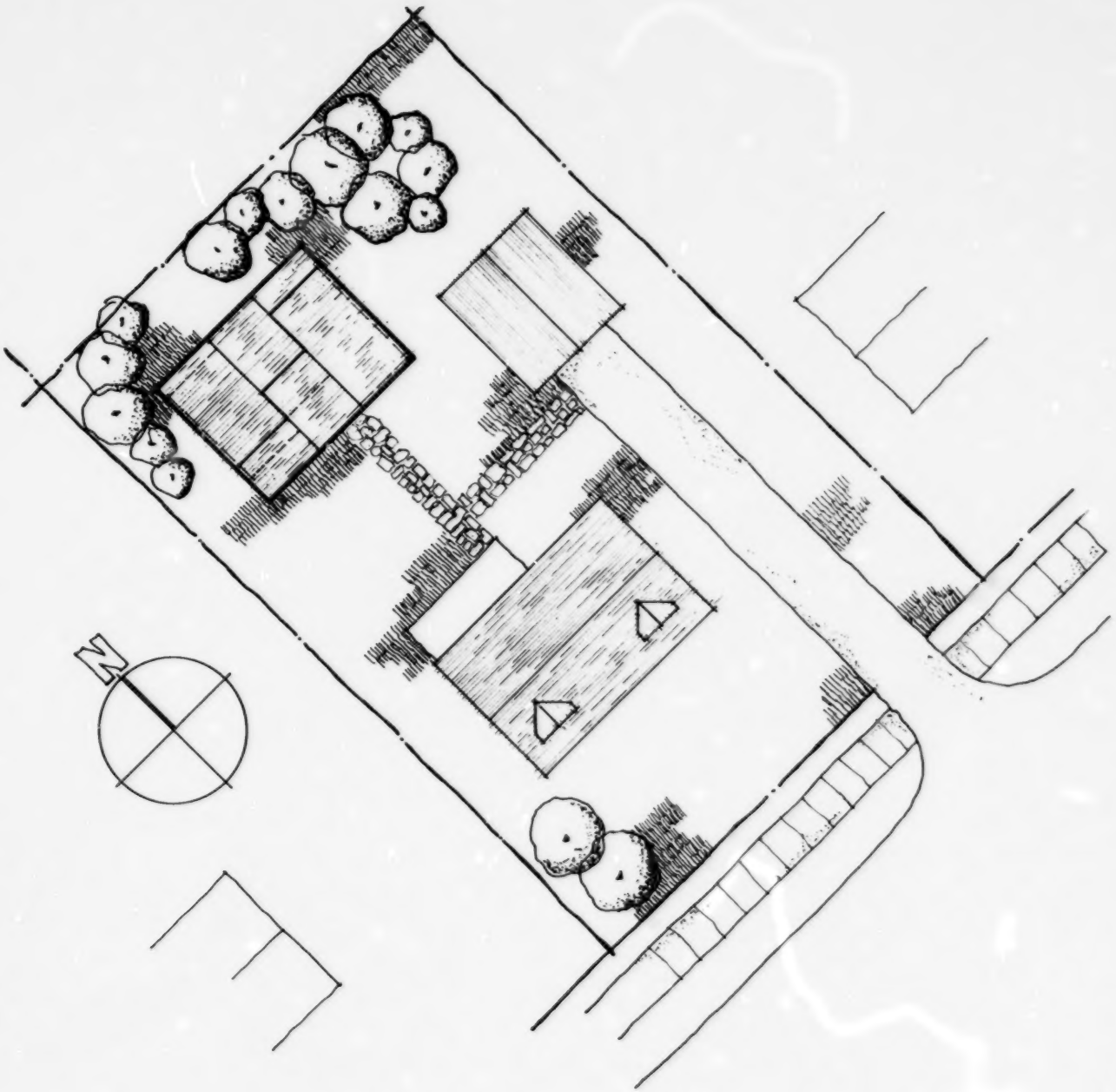
The design is characterized by its assembly of various spaces as single elements into an overall scheme which incorporates good planning and activity zoning into a workable layout.

Indoor/outdoor space relationships are recognized as at the small sitting area under roof shelter by the front door, as well as at the back of the building.

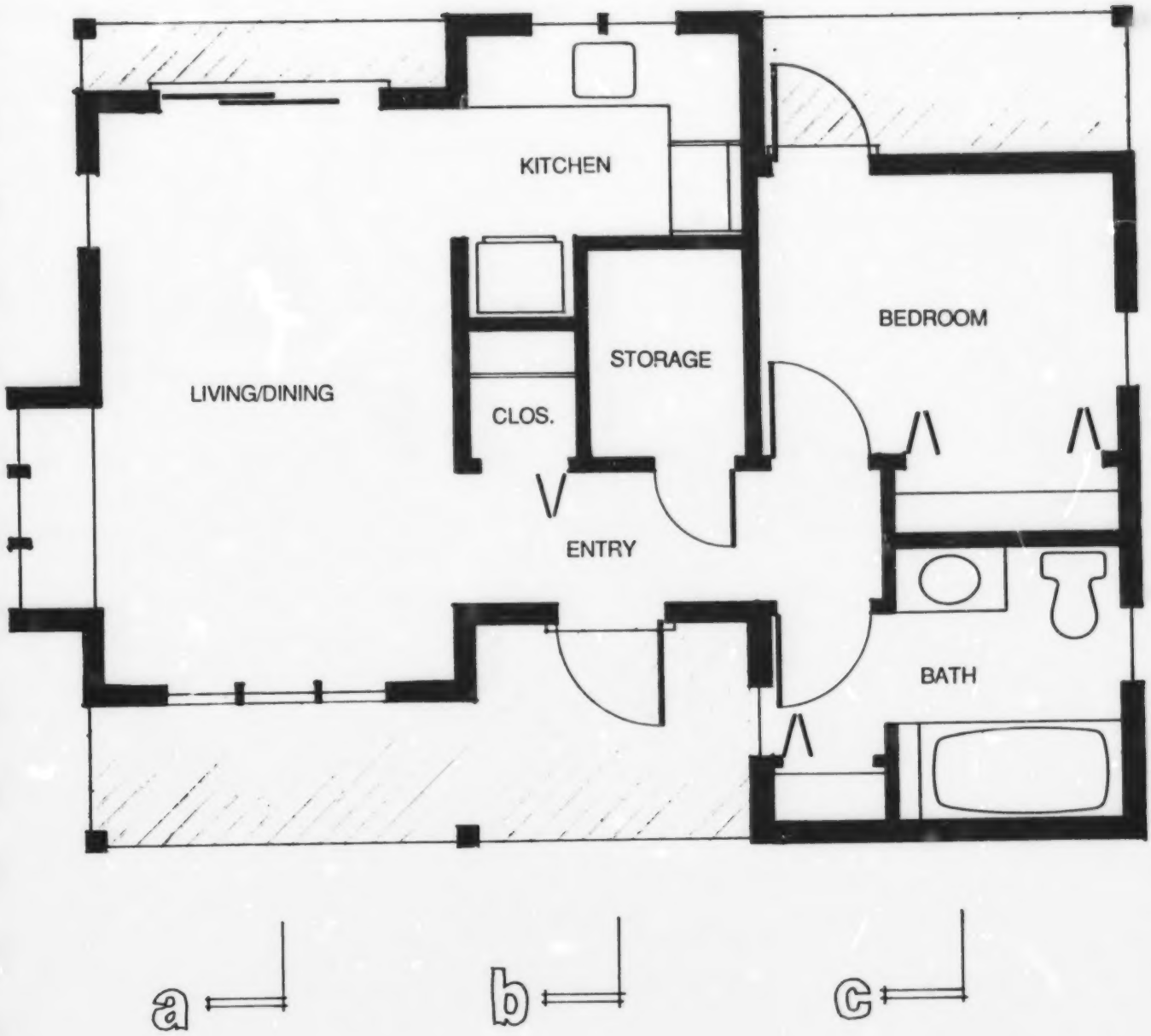
The feature window in the living room is placed low for good visibility, and provides sill space for plants, etc.—something appreciated by seniors.

More detailed analysis and resolution of spaces, such as the kitchen and bathroom, is required to verify that they are adequate in size and wheelchair accessible.

The detailing of the panelized system is weak and it would appear that sectionalized construction would be a more realistic option for mobility.



SITE 1:200



PLAN 1:50

Third Award

Roxanne Button

Designer's Comments

This garden suite or "granny flat" is a prefabricated, modular dwelling designed to be transported to the site on a flatbed and placed in the backyard or sideyard of a typical suburban lot.

The house is of typical wood-frame construction, set on a foundation wall of concrete block filled with concrete; the floor joists are wooden "I-beams". The building is levelled on the foundation using wood blocking and held in place by anchor bolts. The house is shipped to the site in two pieces and joined by steel plates on site, with the exterior cladding and roofing materials added after assembly.

Both designs feature a certain degree of accessibility by disabled residents or visitors: a ramp outside, wider entrance doors, large vestibule, and wheelchair access to the washroom. The small house is designed to "mobility" standards, with access to only the "public" rooms. The second design goes further to allow for the possibility of one of the residents to be disabled, with wheelchair access to the bedroom and to a degree in the kitchen.

The smaller house has a gross floor area of approximately 48 square metres; the other is about 54 square metres. The larger sizes are due to allowances for accessibility.

The house is to be located at the most open side of the lot, to allow views to and from the street. The building is designed as a smaller version of the main house, and therefore fits unobtrusively into the neighbourhood.

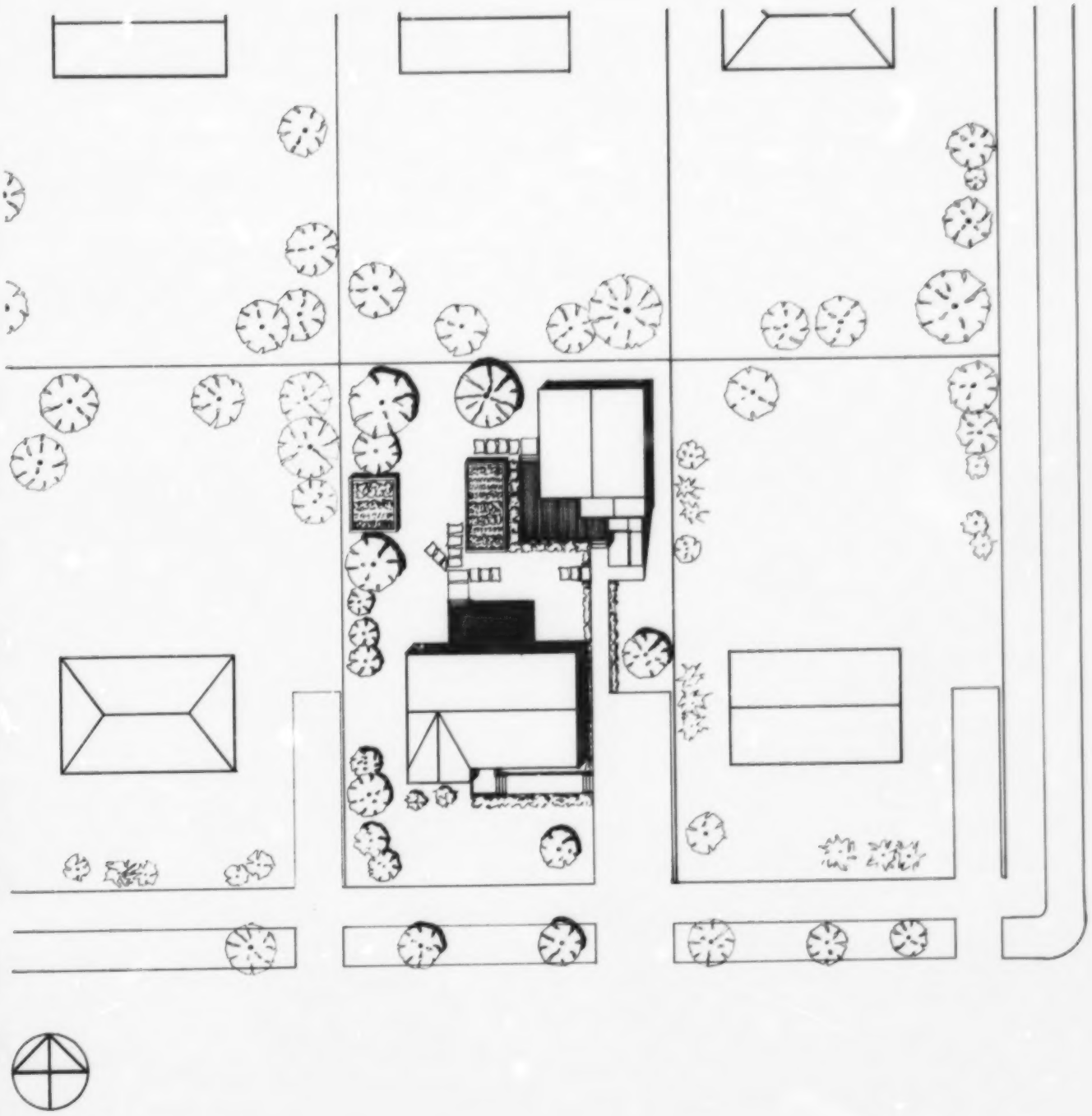
Jury's Comments

This housing unit design pays particular attention to accessibility and interior/exterior elements suited for the elderly.

Its overall modesty disguises the attention paid to provision of suitable spaces and incorporating these into a typical site.

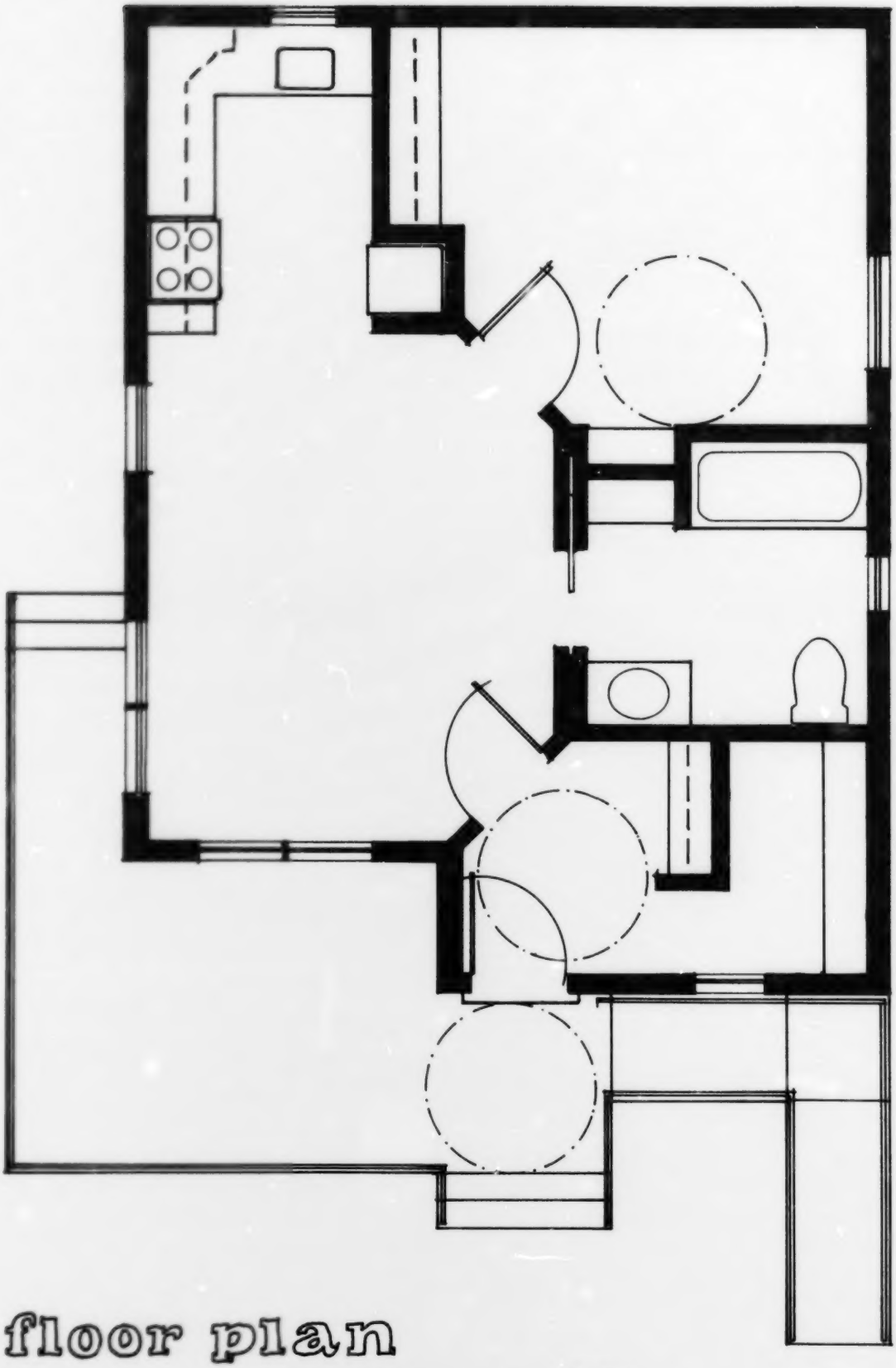
A furniture layout would reveal the shortcomings of the living/dining space as a workable area.

The "sectional design", while a good concept, is not logically resolved in this care (i.e., the sections cut through door openings and roof planes).



Site plan

1:500



floor plan
two-person suite

1:50